Re

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Re: Meta-analysis of Efficacy of Interventions Elevated Depressive Symptoms in Adults Diagnosed With Cancer

Despite the fundamental importance of the question of whether interventions can reduce depressive symptoms among cancer patients, Hart and colleagues (1) had to contend with a literature that is limited in both quality and quantity of studies in their effort to establish basic effect sizes. With few studies to begin with, they had to eliminate four studies because of incomplete data, and they eliminated another study as an extreme outlier in effect size. They were left with five studies they classified as psychotherapeutic and four studies as pharmacologic.

Three of the studies classified as psychotherapeutic were complex collaborative care interventions for depression with medication management components as well as psychotherapy components plus additional components addressing patient education and adherence (2,3). These studies should not have been included if the intent was to establish the effect size of psychotherapeutic interventions. Whether patients received psychotherapy was not determined by randomization and so any evaluation of the specific contribution of psychotherapy was not possible. However, these three studies provided the bulk (n = 527) of the patients for the authors' calculation of the effect size for psychotherapeutic intervention. Of the two remaining studies, one randomly assigned 45 patients to either problem-solving or waitlist control groups and retained only 37 patients for analyses (4). The final study (5) contributed two effect sizes based on comparisons of 29 patients receiving cognitive behavior therapy and 23 receiving supportive therapy with the same 26-patient no-treatment control group, thus violating the assumption of independence of effect sizes. In sum, the authors identified only weak evidence for the efficacy of psychotherapeutic interventions from two small studies with no control group for minimal attention and support.

Of the four pharmacologic studies, one (6) substantially differed from the others in inadequacies in both its determination of depression and its medication management by mail, and reduction in depressive symptoms was not its primary outcome. Of the 163 patients randomized to either treatment or control group, only 93 were available at follow-up. The other three studies also involved substantial loss of patients to follow-up; one of these studies (7) began with a total of 35 patients randomized to active medication or placebo and retained only 21 at follow-up.

Overall, effect sizes for psychotherapeutic and pharmacologic interventions generated by this meta-analysis are misleading as estimates of the efficacy of intervention for depressive symptoms among cancer patients. Any verdicts on the efficacy of interventions for depressive symptoms or calls for these interventions to be disseminated and implemented and integrated into routine care are premature. What would seem most appropriate is acknowledgment of the weakness of available data and the need for more and better quality research with more appropriate control groups.

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Notes

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Response

We appreciate Coyne highlighting several of our original points, including the fundamental importance of the research question and the strikingly small body of relevant randomized controlled trials (RCTs). We agree that each included RCT had limitations. We concur that dissemination into routine care requires additional carefully formulated research.

Two primary points of disagreement with Coyne remain. First, we contend that including collaborative care RCTs and trials with relatively small samples was well reasoned. Our goal (p. 991) was to examine the efficacy of RCTs testing various therapeutic approaches rather than specific psychotherapies. Collaborative care (CC) interventions are well suited for primary care (1) and are gaining traction in oncology (2). Secondary processes in CC, such as education about depression, are common components of psychotherapy (3). In the three CC trials, patients were randomly assigned to CC or usual care. We emphasized (p. 1000) that patients do not invariably receive psychotherapy in a CC model but rather can receive psychotherapy, medication, or both. Most CC patients